



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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July 13, 2010

**MEMORANDUM**

**SUBJECT:** Clarification of DRO Result in Field Blank Sample for Pavillion Groundwater Investigation

**FROM:** Jesse Kiernan  
Organic Chemist

**TO:** Rob Parker  
Site Assessment Manager

With regards to the DRO result for sample PGFB01 (Lab ID# 1001003-23), the detection is mainly comprised of a single peak at a retention time of 12.71 minutes, which eluted prior to the surrogate on the DRO chromatogram. The area of this single peak makes up approximately 43% of the total area of the DRO detection. After checking the other DRO sample chromatograms, this peak was only observed in sample PGFB01. By cross-referencing with the 8270 GC/MS chromatogram, this single peak is most likely 2,4-bis(1,1-dimethylethyl) phenol, as the mass spec chromatogram also showed a similar major peak at a retention time of 19.636 minutes. 2,4-bis(1,1-dimethylethyl) phenol was not one of the calibrated compounds analyzed by the mass spec, but was picked up as a tentatively identified compound with a spectral match quality of 97. Since the laboratory did not calibrate for 2,4-bis(1,1-dimethylethyl) phenol, carryover from a standard is not possible. 2,4-bis(1,1-dimethylethyl) phenol did not show up in any of the laboratory blanks. The 8270 and DRO extractions were conducted on different days, with different sample aliquots, using different extraction glassware, and 2,4-bis(1,1-dimethylethyl) phenol is not a common laboratory contaminant; all of these facts indicate the compound is from the sample and not from laboratory contamination.



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